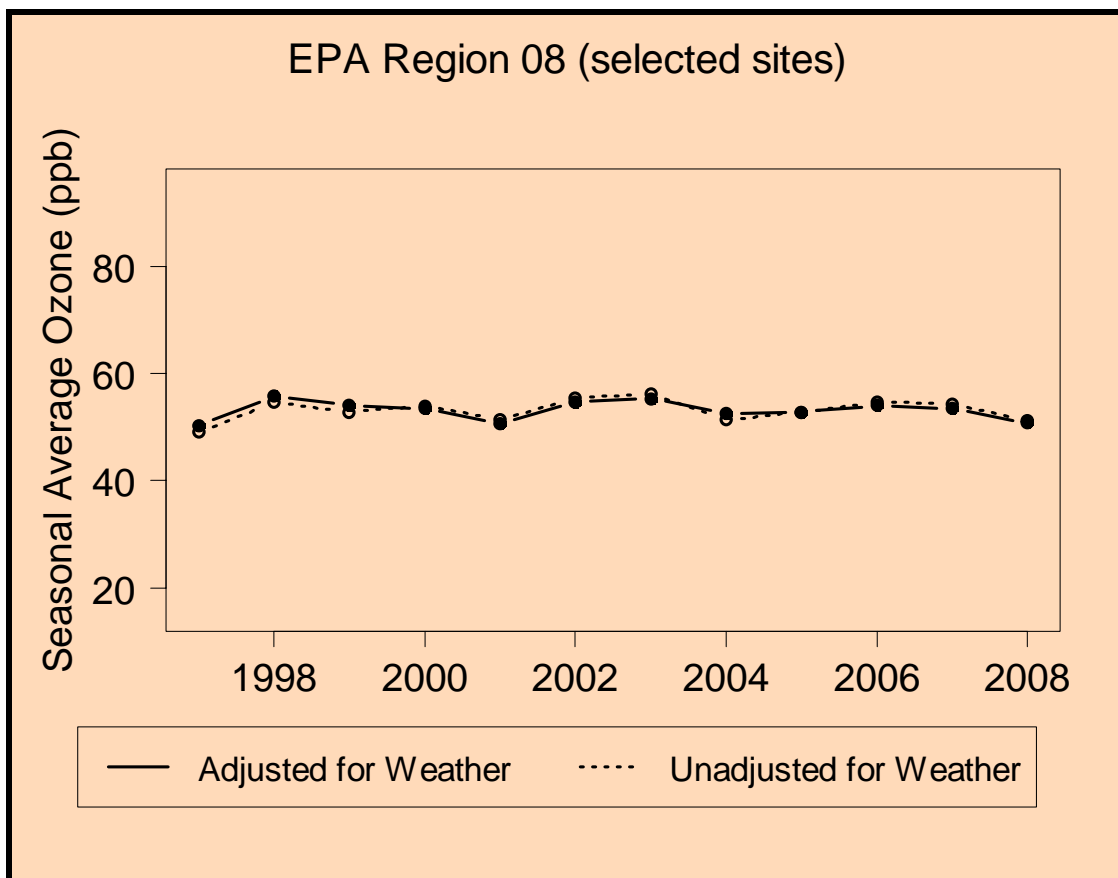


# Weather Makes a Difference: 8-hour Ozone Trends for 1997-2008

State and Local Information for EPA Region 8

Colorado  
Montana  
North Dakota  
Utah  
Wyoming

Composite trend for available areas in the above states:



U.S. Environmental Protection Agency  
Office of Air and Radiation  
Office of Air Quality Planning and Standards

August 2009

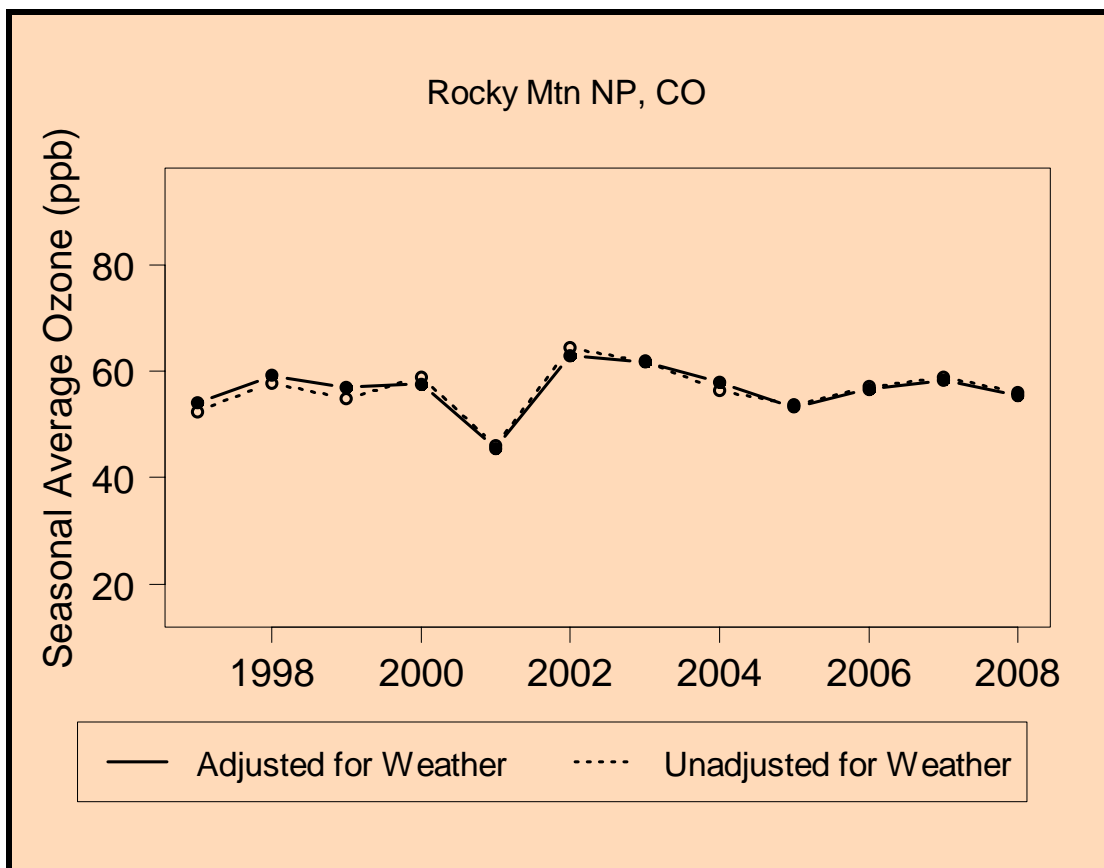
## Colorado

### Ozone

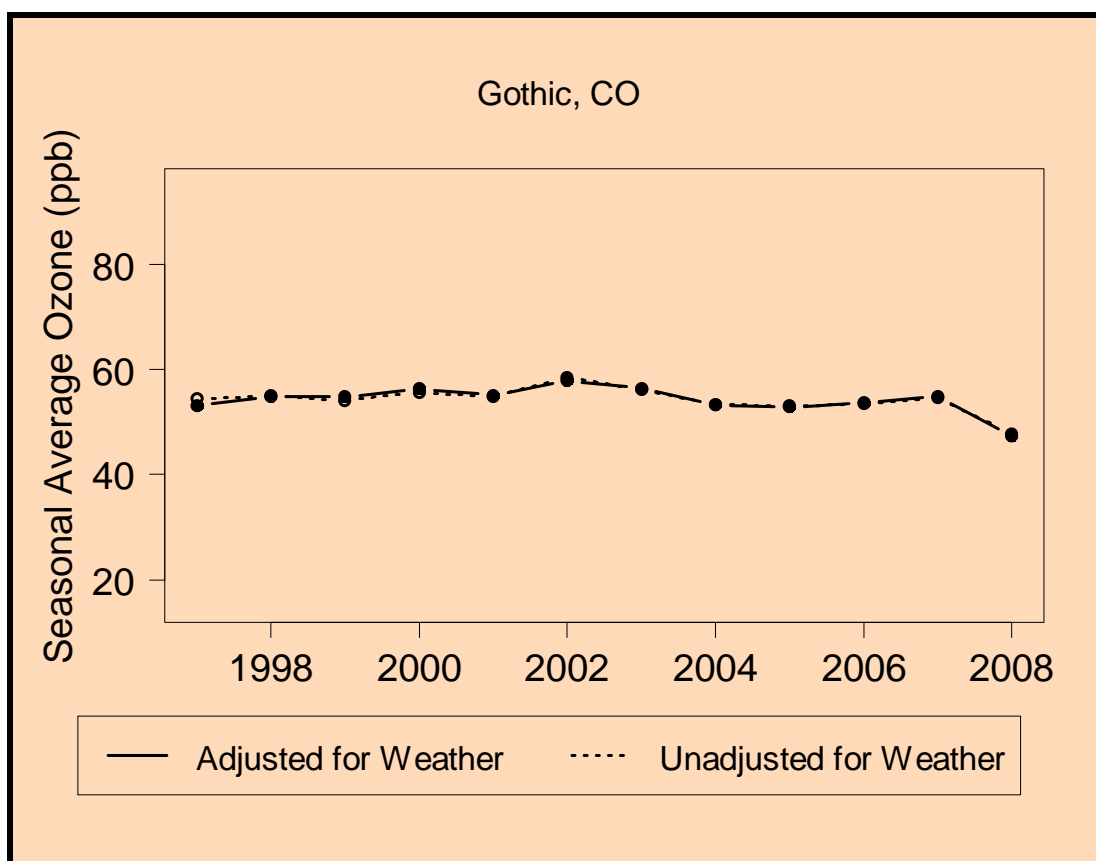
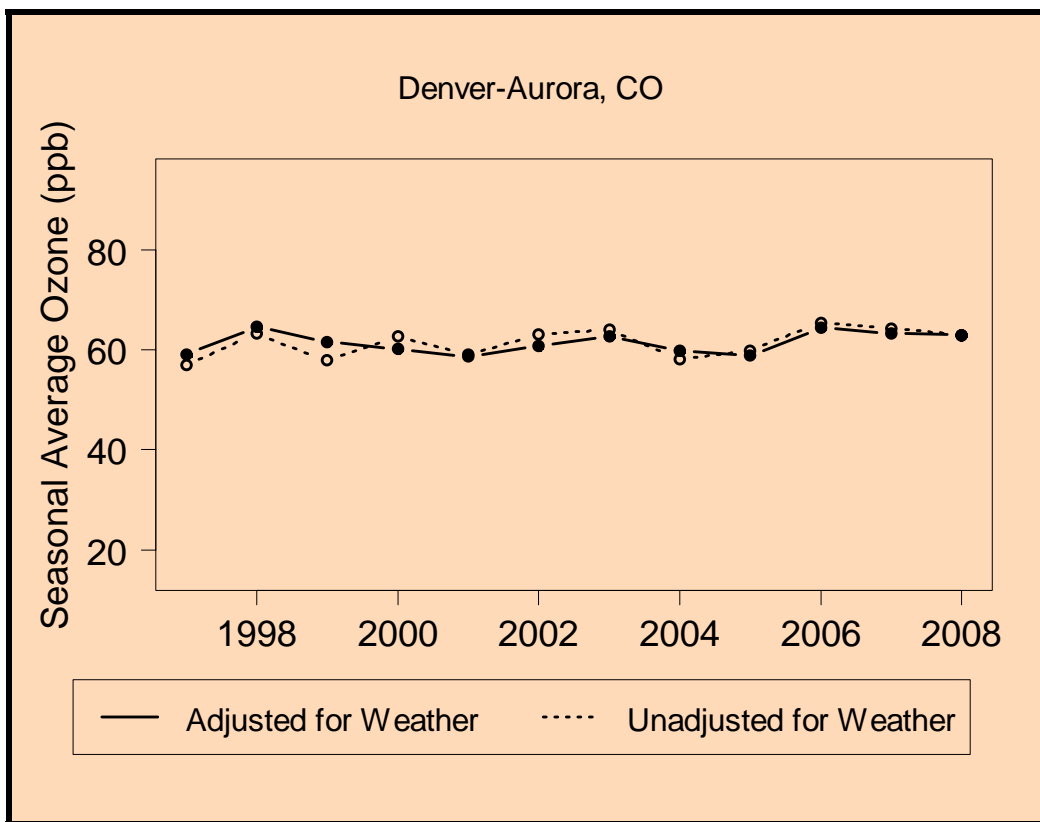
On average, ozone adjusted for weather conditions decreased 1 percent between 1997 and 2008. Ozone trends vary from site to site.

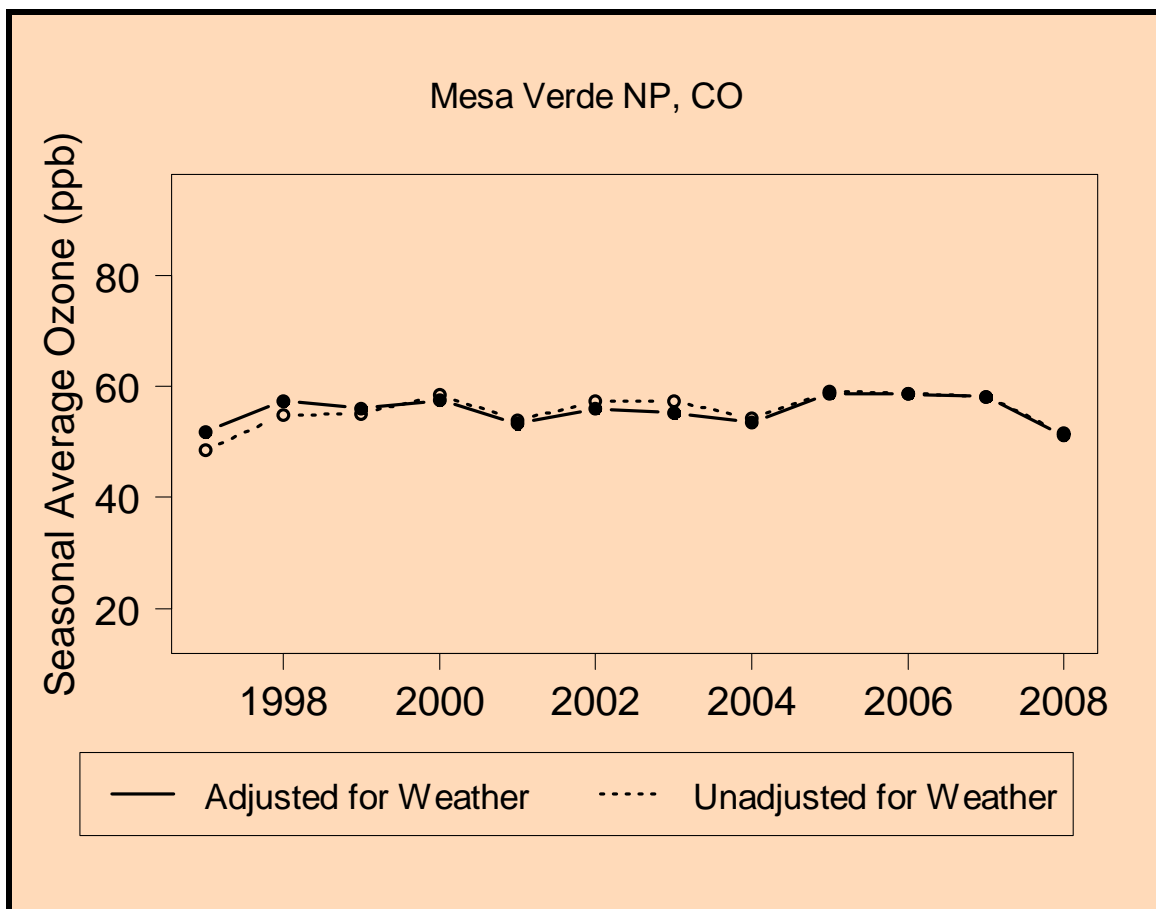
Trends for 1997-2008 for areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends



NP= National Park





NP=National Park

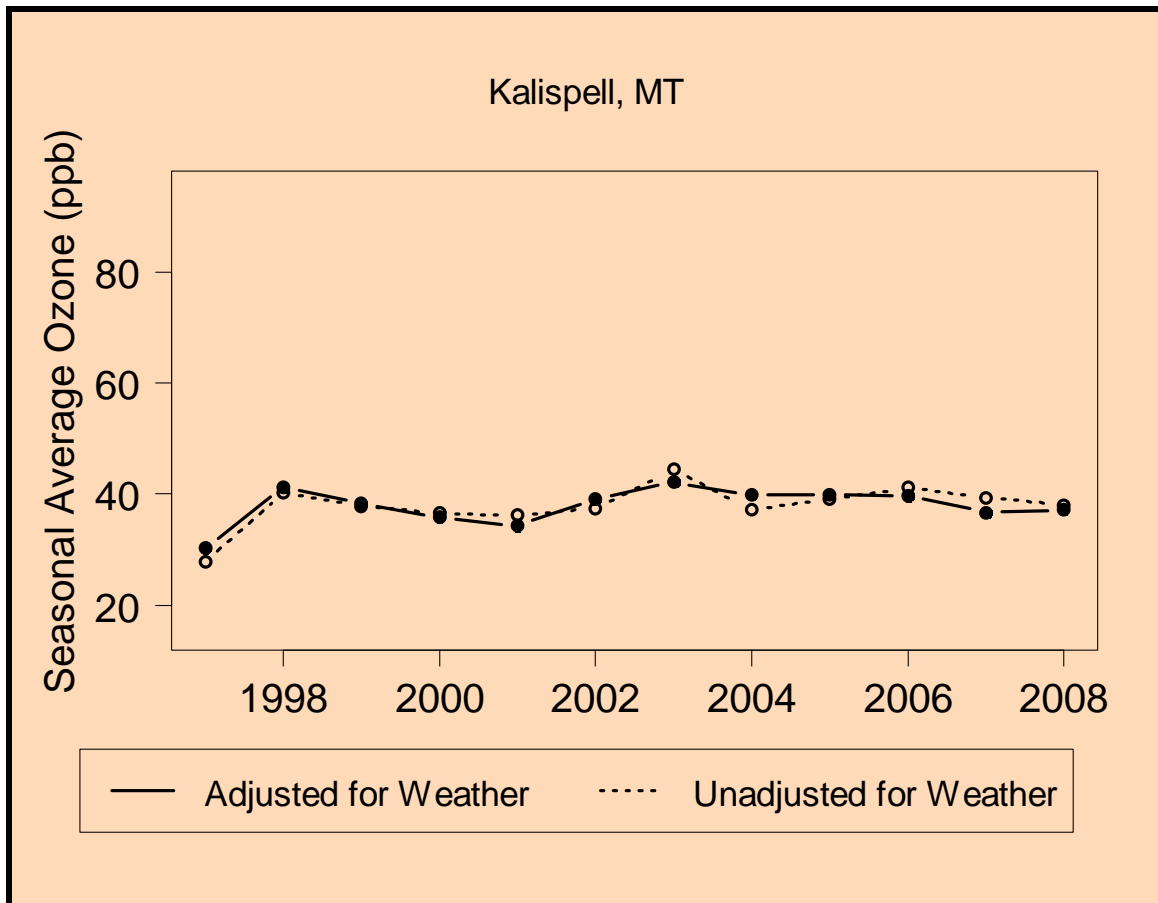
## Montana

### Ozone

In Kalispell, MT, ozone adjusted for weather conditions increased 23 percent between 1997 and 2008. Note that most of this increase occurred from 1997 to 1998. Since 1998, there has been a slight decrease in ozone adjusted for weather conditions.

Trends for 1997-2008 are presented below for sites in the Kalispell, MT area with complete ozone and meteorology data. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends



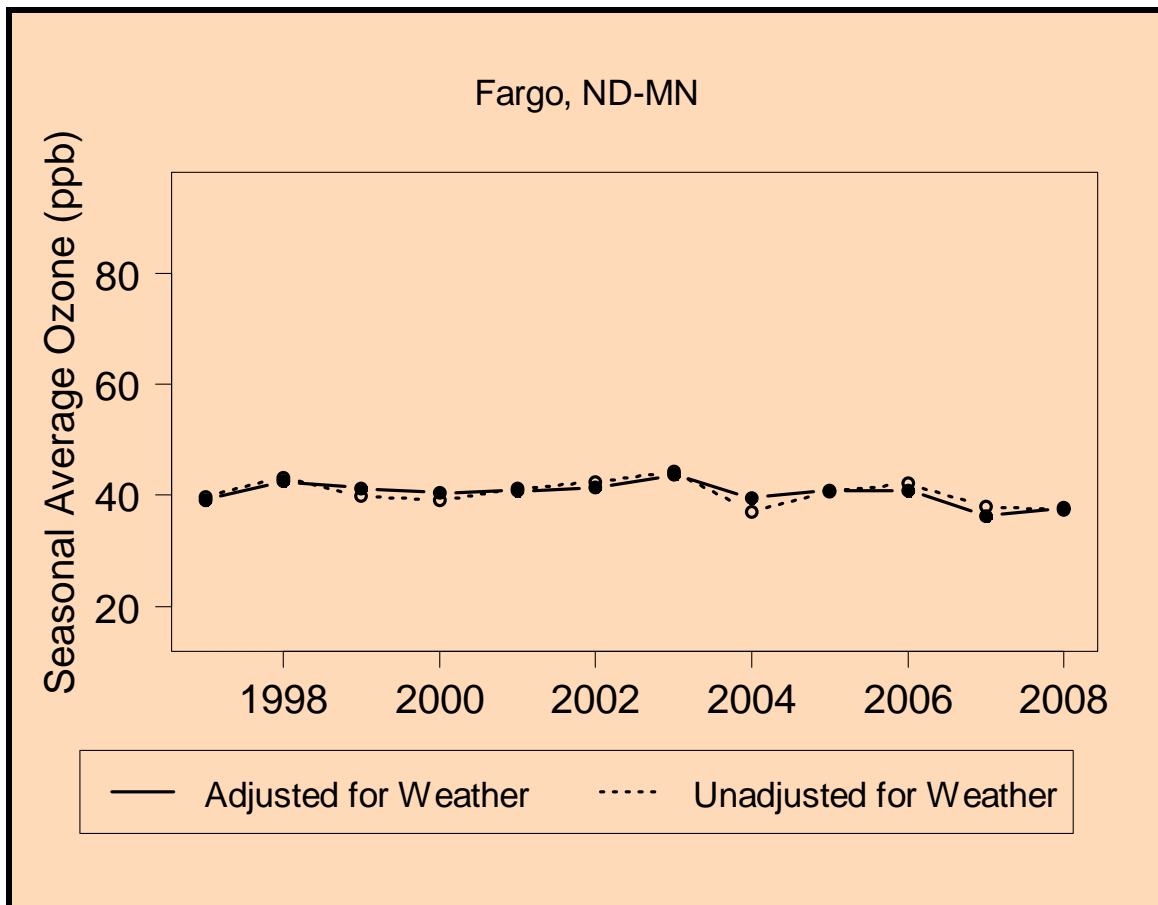
## North Dakota

### Ozone

In Fargo, ND, ozone adjusted for weather conditions decreased 4 percent between 1997 and 2008.

Trends for 1997-2008 are presented below for sites in the Fargo, ND area with complete ozone and meteorology data. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends



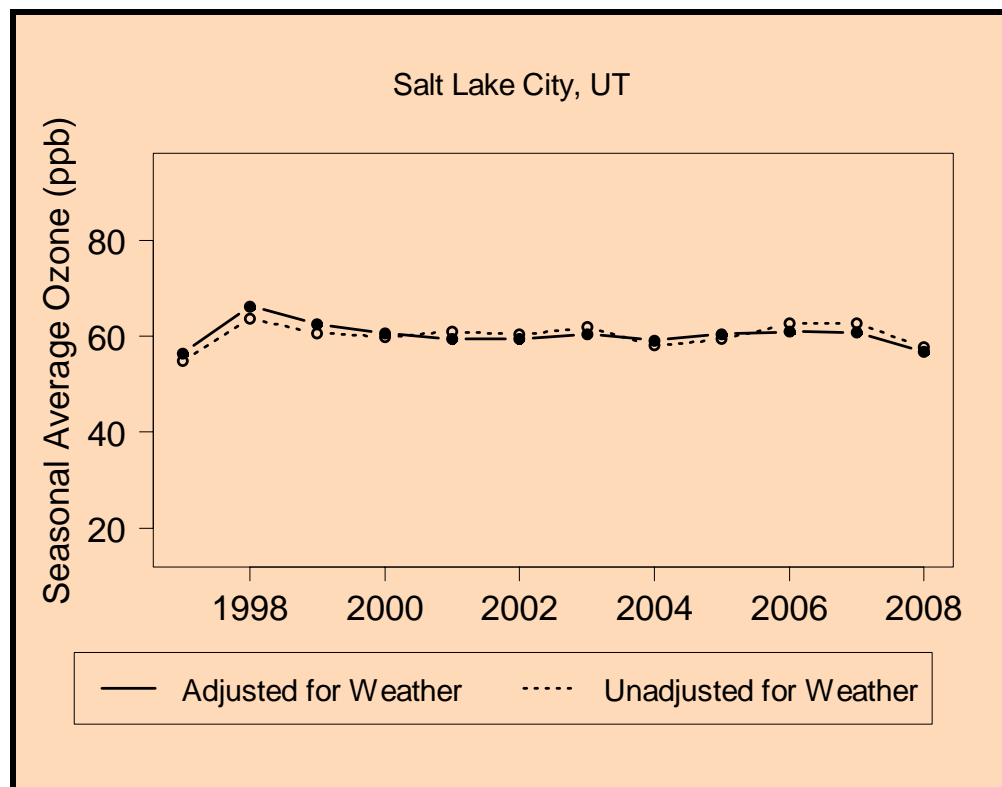
## Utah

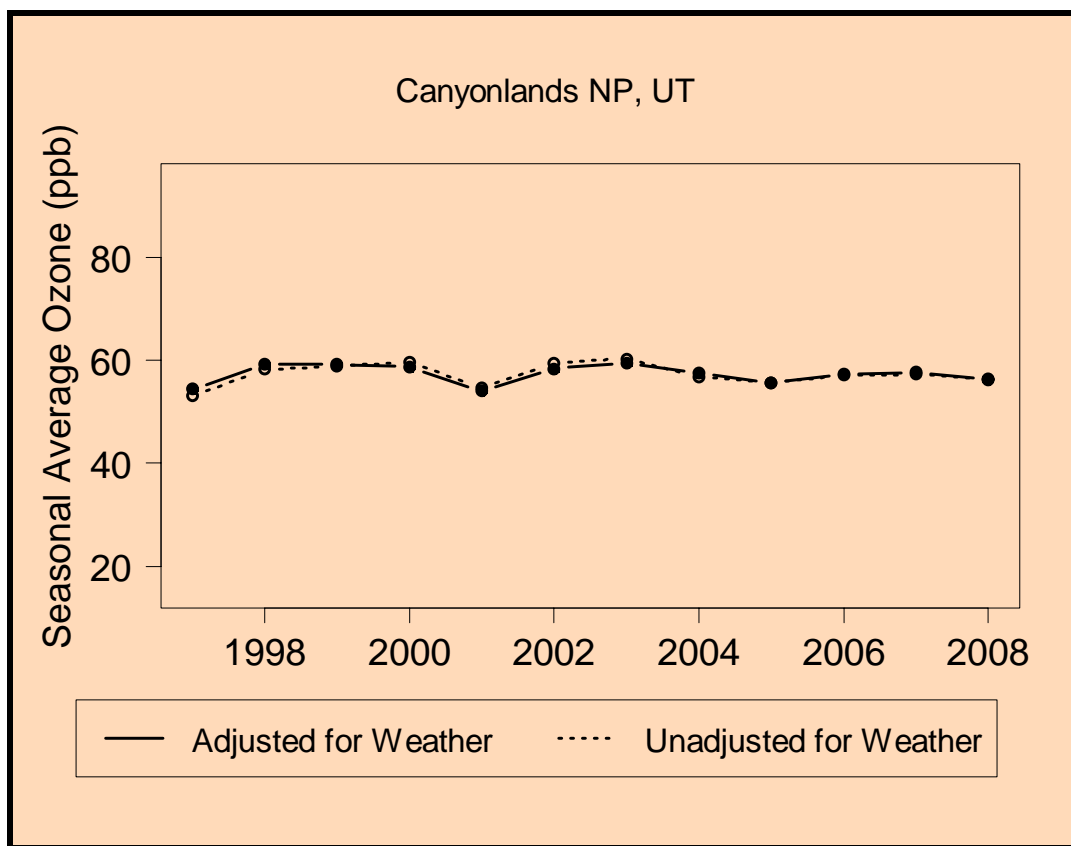
### Ozone

On average, ozone adjusted for weather conditions increased 2 percent between 1997 and 2008. Note that most of this increase is a result of the increase in ozone in the Salt Lake City area between 1997 and 1998. Since 1998, ozone adjusted for weather conditions has shown a slight decrease in the Salt Lake City area.

Trends for 1997-2008 for areas with complete ozone and meteorology data are presented below. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends





NP=National Park



## Wyoming

### Ozone

In Pinedale, WY, ozone adjusted for weather conditions decreased 5 percent between 1997 and 2008.

Trends for 1997-2008 are presented below for sites in the Pineland, WY area with complete ozone and meteorology data. Ozone season (May 1 - September 30) averages of daily maximum 8-hour ozone were adjusted to remove the influence of year-to-year variability in weather conditions. The dotted line shows the trend in observed values at monitoring sites, while the solid line illustrates the underlying ozone trend after removing the effects of weather. The solid line serves as a more accurate ozone trend for assessing changes in emissions. Typical weather conditions are determined by averaging conditions (e.g., temperature, humidity, etc.) for the time period presented. The information provided is useful for reviewing the weather influence for a particular ozone season. The solid line represents ozone levels anticipated under typical weather conditions.

#### Seasonal Average 8-hour Ozone Trends

